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Nicholas Stamos

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EXAMINER

LEMMA, SAMSON B

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/716,336	Applicant(s) STAMOS ET AL.	
	Examiner Samson B. Lemma	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in reply to an amendment filed on February 28, 2008.
2. **Claims 7 and 20** were canceled in the previous amendment. Thus claims **1-6, 8-19 and 21-24** are pending/examined.

Response to Arguments

3. Applicant's remarks/arguments filed on February 28, 2008 have been fully considered but they are not persuasive.
Applicant argument is specifically based on the limitation, **"having a reporter to generate/generating an audit trail from the at least one aggregate event, the audit trail representing usage of the at least one digital asset by the end user" recited** in independent claim 1 and 17. Applicant's representative argued that, this limitation is not disclosed by the reference/s on the record.

In order to support his argument applicant wrote the following.

"While the audit trails of Ginter represent the usage of the electronic property by the consumers, Ginter does not disclose that the audit trails are generated from "at least one aggregate event, "as claimed in independent Claims 1 and 17. As described in the Applicants' specification, an aggregate event is a particular type of event that corresponds to a certain predetermined sequence of atomic level events (see Applicants' specification, page 7, lines 14- 20). Ginter does refer to a

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sort of aggregation, in that payments in the system of Ginter are aggregated, but the aggregation of payments is not equivalent to the aggregate events of the present application and, as such, Ginter discloses no such aggregate events. To interpret any aggregation in Ginter as disclosing the claimed "aggregate events" would be inconsistent with the Applicants' specification. Therefore, because Ginter discloses no such aggregate events, Ginter cannot generate an audit trail from such aggregate events."

Examiner disagrees with the above arguments. A close review of the secondary reference on the record, reveals that Ginter/secondary reference on the record indeed discloses the above argued limitation. Examiner in particular would like to *point out that* **Ginter on column 65, lines 4-34** discloses the following.

"FIG. 35 shows an example overall usage clearing process. In this example, a provider 164 provides a digital property to consumers 95(1), 95(2), 95(3). For example, provider 164 might provide a novel or other work 166 to each of the consumers 95 within electronic containers 152. One or more control sets 188 may be associated with the work 166 (and may, in one example, be delivered within the same electronic container **152 used to deliver the work 166**). **The controls 188 may specify that certain types of usage information must be gathered in the form of an audit trail, and that the audit trail must be reported based on certain time and/or other events.**

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Because container 152 can only be opened within a secure protected processing environment 154 that is part of the virtual distribution environment described in the above-referenced Ginter et al. patent disclosure, provider 164 can be confident that the required audit trails will be generated and reported as he or she instructs. As consumers 95 use the property 166, their electronic appliances 100 automatically gather and store the usage information in the form of audit trails 302. Then, upon the occurrence of a specified event (e.g., once a month, once a week, after a certain number of uses, etc.), the consumer electronic appliances 100 send audit trail information 302 within digital containers to usage clearinghouse 300.”

Usage clearinghouse 300 collects the audit trail information 302, may store it in its database 316, and analyzes the audit trail information to generate a report 304 which it may send to provider 164 within a further electronic container 152.”

As it disclosed above the usage information in Ginter is gathered in the form of **an audit trial based on events and such events includes the occurrence of a certain number of uses of the digital property/assets.**

In view of the above understanding and applicant’s own specification which indicates the fact that system events are events such as read, write, copy and CD-RW access of digital assets, Examiner would point out that such events recited in the limitation are not different from usage

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information which is gathered in the form of an audit trail based on events since such events includes the occurrence of a certain number of uses of the digital property/assets.

The next argument presented was related to the same limitation.

Applicant's representative further argued that in Ginter, the reference on the record the generation of the audit trail does take place in a central location.

In relation to above argument, applicant's representative wrote the following.

“Moreover, even if Ginter did disclose the generation of an audit trail from aggregate events, the generation of the audit trail does not take place at a central location. In Ginter, the audit trails are generated at each of the consumers' locations, and sent to the usage clearinghouse. In contrast, the audit trail of the present application is generated at the journaling server (i.e., a central location) after the journaling server receives the atomic level events from the user client devices. Because Ginter does not disclose that the audit trails are generated from aggregate events and because the audit trails of Ginter are not generated at a central location (i.e., at a location equivalent to the journaling server of the claimed invention), Ginter does not disclose "a journaling server ... having a reporter to generate an audit trail from the at least one aggregate event, the audit trail representing usage of the at least one digital asset by the end user, " as claimed in Claim 1 and as similarly claimed in Claim 17.”

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Examiner disagrees with the above arguments. A close review of the secondary reference on the record, namely Ginter reveals that such limitation is indeed disclosed by the cited reference/Ginter.

*Examiner in particular would like to point out that **Ginter on column 65, lines 29-34** discloses the following.*

*“...Usage clearinghouse 300 collects the audit trail information 302, may store it in its database 316, and analyzes **the audit trail information to generate a report 304** which it may send to provider 164 within a further electronic container 152.”*

As it is indicated above, unlike the applicant’s argument the audit trail is collected in the Clearinghouse which meets the limitation journaling server and it is this “Clearinghouse/journaling server which analyzes **the audit trail information and generates the report 304.**

In response to the next applicant’s argument referring to the lack of motivation/s to combine the two reference/s on the record namely Belfiore and Ginter, Examiner would like to point out that the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation

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is explicitly indicated in the reference themselves. (See the motivation below)

Finally,

In response to applicant's argument referring to the dependent claims examiner would like to point out that the dependent claims stands and falls with the respective independent claims.

Applicant's representative is encouraged to request a telephone interview to discuss how examiner interprets the limitation of the independent claims and how the independent claims could be amended to overcome the ground of rejection set forth in this office action and possible make the application allowable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-6, 8-19 and 21-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Belfiore et al.** (hereinafter referred as **Belfiore**)(U.S. Patent No. 6,990,513 B2) (filed on Jun 22, 2001) in view of

Ginter et al Title (hereinafter refereed as **Ginter**) (Patent No. 7,165,174 B1) (filed on December 17,1999)

5. As per claims 1 and 16-17 and 23-24 Belfiore discloses a system for providing a usage accountability model for data security in a data processing system comprising:

- **A user device having a sensor for to sense or capture atomic level events at a point of authorized access to at least one digital assest by an end user client device;** *[column 20, lines 57-58, figure 5, ref. Num “606” see “atomic events provided by event sources 602”/As shown on figure 5, ref. Num “606” the atomic events are captured)* **the sensor located within an operating system kernel within a user client device;** *Column 28, lines 1-6 and column 22, lines 46-56] [For instance on column 28, lines 1-6 the following has been disclosed. “In one embodiment, the HTTP client is implemented in kernel mode. Reasons for implementation in kernel mode include 1) performance; 2) communication with kernel components; and 3) listener/talker integration. The benefits of listener/talker integration include performance optimizations and shared implementation.” Furthermore on column 22, lines 46-56 the following has been disclosed. The event system includes a highly optimized publication and subscription service driven by model-based subscription registrations. The events system allows for flexibility and choice of the service to publish events, such as, by way of example, kernel events (e.g. WDM drivers events) that utilize a kernel driver*

programming model, non-COM APIs for publishing events (e.g. security audit events, a directory, a service control manager) that utilize a low-level operating system service programming model, classic COM interfaces for normal applications, and high-level COM+ classes that utilize native COM+ programming model.) and

- a journaling server having **An aggregator, to accept or for accepting the atomic level events from the user client device and to generate an aggregate at least some of the atomic level events to generate at least one aggregate based on a predetermined sequence of atomic level events.** [column 21, lines 4-12 and column 20, lines 57-67] (*Event composition 608 aggregates, filters, and transforms lower-level events (atomic events 606) which meets the limitation of “multiple atomic level events” into higher-level events 612, which meets the limitation of a journal/aggregate event. And, at times, maps the events directly into actions, such as world action 614. The actions include real-world actions 614 and information-gathering actions 616 that serve to gather new events via actively polling or listening. **Event composition 608 provides methods for combining events** and data, whether the events are observed in close temporal proximity or at widely different times. On column 20, lines 57-67, the following has also been disclosed, “The event component 155 transforms fundamental or atomic events 606 provided by event sources 602 into progressively higher-level events/predetermined sequence of atomic level; through an event composition mechanism 608. The process of event composition is the construction of new events or actions from a set of observed events and/or*

stored event data. Event composition may be driven by rules, filters, and by more advanced pattern recognizers spanning a spectrum of sophistication all the way up to rich inferential machinery. Thus, event composition adapts the set of available atomic events 606 into observations 610 that are appropriately matched to the informational requirements of software components, providing them with information at the right level of abstraction to make good decisions.)

Belfiore does not explicitly disclose, the following limitation added by the amendenent.

"Having a reporter to generate an audit trail from the at least one aggregate event, the audit trail representing usage of the at least one digital asset by the end user"

However, in the same field of endeavor, **Ginter on column 65, lines 4-34** discloses the following which meets the above limitation.

"FIG. 35 shows an example overall usage clearing process. In this example, a provider 164 provides a digital property to consumers 95(1), 95(2), 95(3). For example, provider 164 might provide a novel or other work 166 to each of the consumers 95 within electronic containers 152. One or more control sets 188 may be associated with the work 166 (and may, in one example, be delivered within the same electronic container 152 used to deliver the work 166). The controls 188 may specify that certain types of usage information must be gathered in the form of an audit trail, and that the audit trail must be reported based on certain time and/or other events.

Because container 152 can only be opened within a secure protected processing environment 154 that is part of the virtual distribution environment described in the above-referenced Ginter et al. patent disclosure, provider 164 can be confident that the required audit trails will be generated and reported as he or she instructs. As consumers 95 use the property 166, their electronic appliances 100 automatically gather and store the usage information in the form of audit trails 302. Then, upon the occurrence of a specified event (e.g., once a month, once a week, after a

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certain number of uses, etc.), the consumer electronic appliances 100 send audit trail information 302 within digital containers to usage clearinghouse 300.

*Usage clearinghouse 300 collects the audit trail information 302, may store it in its database 316, and analyzes **the audit trail information to generate a report 304** which it may send to provider 164 within a further electronic container 152."*

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to combine the features such as "having a reporter to generate an audit trail from the at least one aggregate event, the audit trail representing usage of the at least one digital asset by the end user" as per teachings of **Ginter** into the method as taught by **Belfiore** for the purpose of building a data security model which includes usage information while at the same time aggregating and providing a high level of accountability. [See for instance, Ginter column 57, lines 9-11]

6. **As per claims 2-3 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system wherein, the aggregate events are associated with a particular executing process/with a particular user. [column 34-45 and column 21, lines 4-12 and column 20, lines 57-67] (The event component 155 of the present invention transparently facilitates the distributed communication of events between any software component that publishes or generates events ("event source") and any software component that subscribes to or receives event notifications ("event sink"). In this description and in the claims, an event is an**

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*observation about one or more states such as, for example, the status of system components, **the activity of a user.**)*

7. **As per claims 4 and 18 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system wherein the user client device further includes: a filter for filtering atomic level events with an approved event list and wherein the aggregator only accepts atomic level events not filtered out by the filter.** [Column 21, lines 4-19 and column 20, lines 62-column 21, lines 3 and column 22, lines 63-64] (Event composition 608 aggregates, filters, and transforms lower-level events (atomic events 606) into higher-level events 612 and, at times, maps the events directly into actions, such as world action 614. and on column lines it has been disclosed that Event composition may be driven by rules, filters, and by more advanced pattern recognizers spanning a spectrum of sophistication all the way up to rich inferential machinery. Thus, event composition adapts the set of available atomic events 606 into observations 610 that are appropriately matched to **the informational requirements of software components/ such requirements meets the limitation of approved event list**, providing them with information at the right level of abstraction to make good decisions.)

8. **As per claims 5-6 and 19 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system wherein the approved event list includes a list of approved file identifiers/hash code.**[Figure 5, ref.

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Num 610/612 and 622, column 21, lines 3-35] (As shown on figure 5, High level events shown as 612 which meets the limitation of approved event list is stored in event store as shown on figure 5, 622 inferences are performed. Such events should have some kinds of identifier when they are stored and hashing a value for the sake of utilizing the space requirement is something which is also included in storing the list of approved file identifiers / high level events 612)

9. **As per claims 8 and 21 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system** wherein the user client device includes: a coalescer to coalesce atomic multiple events output by the sensor into a single event prior to inputting them to the aggregator.
[Figure 5, ref. Num “606”]
10. **As per claims 9-10 and 22 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system wherein** a bundle of coalesced events is created prior to their transmission between the user client device and the server. [Figure 5, ref. Num “608”/event composition meets the limitation of a bundle of coalesced events]
11. **As per claim 11 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system** wherein the at least one aggregate /journal event is detected as a suspect action with a data file. [column

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23, lines 64-column 24, lines 22 *and column 21, lines 4-12 and column 20, lines 57-67*]

12. **As per claim 12 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system** wherein the at least one aggregate event is attributable to a known/end user, a thread and/or an application as identified at a known time. [figure 5, see “Time”]
13. **As per claim 13 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system** wherein the coalescer reports a single coalesced event after a time out period with no activity. [column 24, lines 21-22, “*notify me if there is no mouse movement and no key is pressed in 5 minutes*”]
14. **As per claims 14-15 the combination of Belfiore and Ginter discloses a system/method as applied to claims above. Furthermore Belfiore discloses the method/system wherein aggregate events are used to control security of the data processing system by determining patterns of unexpected behavior based on the at least one aggregate event and the audit trail.** [column 21, lines 50-53 and column 23, lines 64-column 24, lines 22 *and column 21, lines 4-12 and column 20, lines 57-67, See also the following which is disclosed by Ginter on column 65, lines 4-34. “FIG. 35 shows an example overall usage clearing process. In this example, a provider 164 provides a digital property to consumers*

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95(1), 95(2), 95(3). For example, provider 164 might provide a novel or other work 166 to each of the consumers 95 within electronic containers 152. One or more control sets 188 may be associated with the work 166 (and may, in one example, be delivered within the same electronic container 152 used to deliver the work 166). The controls 188 may specify that certain types of usage information must be gathered in the form of an audit trail, and that the audit trail must be reported based on certain time and/or other events. Because container 152 can only be opened within a secure protected processing environment 154 that is part of the virtual distribution environment described in the above-referenced Ginter et al. patent disclosure, provider 164 can be confident that the required audit trails will be generated and reported as he or she instructs. As consumers 95 use the property 166, their electronic appliances 100 automatically gather and store the usage information in the form of audit trails 302. Then, upon the occurrence of a specified event (e.g., once a month, once a week, after a certain number of uses, etc.), the consumer electronic appliances 100 send audit trail information 302 within digital containers to usage clearinghouse 300. Usage clearinghouse 300 collects the audit trail information 302, may store it in its database 316, and analyzes **the audit trail information to generate a report 304** which it may send to provider 164 within a further electronic container 152.”)

Conclusion

- 15. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

06/02/2008

/Samson B Lemma/
Examiner, Art Unit 2132

/Gilberto Barron Jr/
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